



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,453	01/31/2001	John SanGiovanni	MS155617.1/40062.103US01	8021

7590 01/29/2004

DAVID D WIER
MERCHANT & GOULD PC
P O BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 01/29/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,453

Applicant(s)

SANGIOVANNI, JOHN

Examiner

Leonid Shapiro

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-35 is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 20-26 is/are rejected.
- 7) ☒ Claim(s) 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 26 November 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Drawings

1. The drawings were received and approved on 11-26-03. This drawing is Fig. 5.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of independent claims 1, 13 and 20: "a plurality of input sensing devices, each section having at least one sensing device" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-7, 20, 22-23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerpheide (US Patent 6,473,069 B1).

As to claim 1, Gerpheide teaches computing system (item 16, in Fig. 3) having a user interface, a user input device for inputting information into a computing system (See Fig. 3, items 36, See Col. 7, Lines 24-33), the user input device comprising: a tactile surface divided by a plurality of sections (items 78, 84, 86 in Fig. 4D and items 90, 92 in Figs. 5A and 5C), each

Art Unit: 2673

section being tactilely distinguished from an adjacent section (See Col. 8, Lines 26-49), input sensing device detecting an input stroke defining a user request and transmitting a selection signal indicative of user request to the computing system (items 78, 84, 86, in Fig. 4D) whereby information is input into a computing system in response to reception of the selected signal (See Col. 8, Lines 26-30).

Gerpheide does not explicitly teaches a plurality of input sensing devices and each section (items 84, 78 in Fig. 4B) having at least one input sensing device. However, it would have been obvious to one skill in the art at the time of the invention was made to have recognize that Gerpheide touch-sensitive surface supplies position data, such as x, y, coordinate data to computing system and function the same as Applicant's touchpad (See Fig. 1, item 100, in description See page 6, Lines 19-20).

As to claim 20, Gerpheide teaches computing system having a user interface having a user input device having a tactile surface (See Fig. 3, items 36. See Col. 7, Lines 24-33), a method for inputting control and text commands into the computing system, the method comprising: a tactile surface divided by a plurality of sections, each section being tactilely distinguished from an adjacent section(items 84, 86, 78 in Fig. 4D, items 90, 92 in Figs. 5A and 5C) thereby providing orientation feedback to a user selecting at least one input sensing device associated with a specific user request (See Col. 8, Lines 26-49), initializing input sensitive device that area associated with a task to be performed in the computing system, detecting an input stroke, the input stroke requesting performance of the task by the user; and in response to the detecting act, transmitting a selection signal to the computing system whereby a command is input into the computing system (See Fig. 4D, items 84,86,78, See Col. 8, Lines 26-30).

Art Unit: 2673

Gerpheide does not explicitly teaches a plurality of input sensing devices and each section (items 84, 78 in Fig. 4B) having at least one input sensing device. However, it would have been obvious to one skill in the art at the time of the invention was made to have recognize that Gerpheide touch-sensitive surface supplies position data, such as x, y, coordinate data to computing system and function the same as Applicant's touchpad (See Fig. 1, item 100, See page 6, Lines 19-20).

As to claims 2, 4, 22-23, Gerpheide teaches each sensing device and method is associated with an information element associated with a task to be performed in the computing system or activates an application installed on the computing system (See Fig. 4D, items 84,86,78, See Col. 8, Lines 26-30).

As to claims 5-7, 25 Gerpheide teaches the application activates from group consisting of a desktop environment, an operating system, and a control of an application program by emulating mouse (See Fig. 4D, items 78, 84, 86, See Col. 8, Lines 26-30).

4. Claims 3, 8-9, 11-17, 21, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerpheide in view of Perlin (US Patent no. 6,031,525).

As to claims 3, 21, Gerpheide does not show the text input into an application installed on the computing system.

Perlin teaches the text input (items 12, 14 in Fig. 1a) into an application installed on the computing system (See Fig. 1a, item 12, See Col. 2, Lines 1-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the text input into an application installed on the computing system as shown by

Art Unit: 2673

Perlin in the Gerpheide apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 8, 24 Gerpheide teaches at least one input sensing device is associated with an application selection information element associated with the task of activating an application (item 36 in Fig. 3) installed on the computing system (item 16 in Fig. 3) and at least one input sensing device is associated with an application operation information element associated with the task of providing control over of an application installed on the computing system by emulating mouse (See Fig. 4D, items 78, 84, 86, See Col. 8, Lines 26-30).

Gerpheide does not show at least one input sensing device associated with a text input information element associated with the task of textual and character input into an application installed on the computing system.

Perlin teaches the text input (items 12, 14 in Fig. 1a) into an application installed on the computing system (See Fig. 1a, item 12, See Col. 2, Lines 1-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the text input into an application installed on the computing system as shown by Perlin in the Gerpheide apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 9, Gerpheide teaches outer circumferential portion forming a single section whereby the input stroke contacts at least one section to request performance of a particular task (See Fig. 4D, item 86, See Col. 8, Lines 26-30).

Art Unit: 2673

Gerpheide does not show a central portion forming a single section; and a petals portion having a plurality of petals angularly dividing the tactile surface between the central portion to an outer circumferential portion of the tactile surface, each petal forming a single section.

Perlin teaches a central portion forming a single section (item 20 in Fig. 2); and a petals portion having a plurality of petals angularly dividing the tactile surface (item 18 in Fig. 2), each petal forming a single section (See Col. 2, Lines 1-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a central portion and petals as shown by Perlin in the Gerpheide apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 11, Gerpheide teaches a touchpad having a tactile pattern (item 86 in Fig. 4D providing orientation feedback to a user selecting specific user request (See Col. 8, Lines 26-30).

As to claim 12, Gerpheide teaches each input sensing device is a button detecting the input stroke (See Fig. 4D, items 84,86,78, See Col. 8, Lines 26-30).

As to claim 13, Gerpheide teaches computing system (item 16 in Fig. 3) having a user interface, a user input device (item 36 in Fig. 3) for inputting control and text commands into a computing system (See Col. 7, Lines 24-33), the user interface selection device comprising: a tactile pattern providing orientation feedback (items 78,82,84 in Fig. 4D and items 90. 92 in Figs. 5A and 5C) to a user selecting a specific user request (Col. 8, Lines 26-49); an outer portion separating an outer boundary of the tactile touchpad from the plurality of sectors, the outer portion being tactilely distinguished from the plurality of sectors and forming a single section (See Fig. 4D, item 86, in description See Col. 8, Lines 26-30), input sensing device detecting an input stroke defining a control or text command (item 84,86,78 in Fig.4D) and transmitting a

Art Unit: 2673

selection signal indicative of a control or text command to the computing system (See Col. 8, Lines 26-30).

Gerpheide does not explicitly teaches a plurality of input sensing devices and each section (items 84, 78 in Fig. 4B) having at least one input sensing device. However, it would have been obvious to one skill in the art at the time of the invention was made to have recognize that Gerpheide touch-sensitive surface supplies position data, such as x, y, coordinate data to computing system and function the same as Applicant's touchpad (See Fig. 1, item 100, See page 6, Lines 19-20).

Modified Gerpheide does not show a central portion separating the center of the tactile touchpad from the plurality of petals, the central portion being tactilely distinguished from the plurality of petals and forming a single section; the touchpad angularly divided by a plurality of petals, each petal being tactilely distinguished from an adjacent petal and forming a single section.

Perlin teaches show a central portion forming a single section (item 18 in Fig. 20); and a petals portion having a plurality of petals angularly dividing the tactile surface (item 18 in Fig. 20), each petal forming a single section (See Col. 2, Lines 1-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a central portion and petals as shown by Perlin in the Gerpheide apparatus in order to enter and edit entire documents efficiently (See Col. 1, Lines 18-19 in the Perlin reference).

As to claim 14, Perlin teaches text command is selected with an out-return stroke beginning on a central portion, continuing to at least one petal, and terminating in central portion,

Art Unit: 2673

the out-return stroke requesting textual input to the computing system (See Fig. 2. items 18,20, 22, See Col. 3, Lines 28-31).

As to claims 15, 17 Perlin teaches text command is selected with an out-return stroke beginning on a central portion (item 18 in Fig. 2), continuing to at least one petal (item 20 in Fig. 2), and terminating in central portion, the out-return stroke requesting textual input to the computing system (See Fig. 2. item 22, See Col. 3, Lines 28-31) and Gerpheide teaches drug-out stroke (See Fig. 4A, item 66, in description See Col. 9, Lines 24-28).

5. Claims 10, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable Gerpheide and Perlin as aforementioned in claim 9 in view Montgomery (US Patent No. 6,441,753).

As to claim 10, Gerpheide and Perlin do not show a raised reference point tactilely identifying the central portion.

Montgomery teaches a raised central hub (See Fig. 2, item 48, See Col. 2, Lines 59-60 and Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a raised central portion as shown by Montgomery in the Gerpheide and Perlin apparatus in order to enter and edit entire documents efficiently.

As to claim 26, Gerpheide and Perlin do not show sensing contact with a button, wherein the transmitting act implemented when the button is depressed.

Montgomery teaches sensing contact with a button item 4 in Figs. 1-2), wherein the transmitting act implemented when the button is depressed (See Col. 1, Lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a raised central portion as shown by Montgomery in the Gerpheide and Perlin method in order to enter and edit entire documents efficiently.

Allowable Subject Matter

6. Claims 27-35 are allowed.

7. Claims 16, 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance:

Relative to claims 16 and 18 the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not teach** control command is selected with a dial stroke beginning on a petal, continuing to at least one other petal and terminating on the other petal.

Relative to claim 19 and the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not teach** cancellation of the performance of the command identified by the input stroke.

Relative to claims 27-35 the major difference between the teaching of the prior art of record (US Patent No. 6,473,069 B1 to Gerpheide and US Patent no. 6,031, 525 to Perlin) and the instant invention is that the said prior art **does not teach** the initializing act: comprising:

Art Unit: 2673

associating each input sensing device to one of a plurality of information elements, each information element being associated with a task to be performed by the computing system.

Response to Arguments

9. Applicant's arguments filed on 11-26-03 with respect to claims 1-15, 17, 20-26 have been considered but are moot in view of the new ground(s) of rejection.

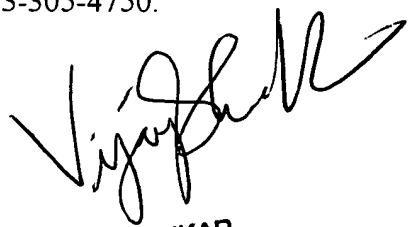
Telephone inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

ls


**VIJAY SHANKAR
PRIMARY EXAMINER**